

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022750**Date Inspected:** 23-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in the Bay 10:

SMAW repair welding of weld joint BK010A1-001-043 located on PCMK OBG bike path. Welder was identified as 056364. QC was identified as ABF CWI Liu Cheng (QC1). Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Zhu Peng (QCA1), who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-2G(2F)-repair as displayed on ZPMC Weld Repair Report B-WR20490 as presented to this QA Inspector and verbally identified by QCA1.

SMAW repair welding of 31TR1, 31TR2, 31TR3, 36TR1 located on PCMK OBG traveler rail. Welder was identified as 050038. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-1G(1F)-repair as displayed on ZPMC Weld Repair Report B-WR16931 as presented to this QA Inspector and verbally identified by QCA1. See below for photo of page 1 of B-WR16931 and photo of welder 050038 preheating the base metal prior to SMAW welding another repair. Note the several repairs previously preformed.

SAW welding of weld joint BK16-001-016 located on PCMK OBG bike path, cantilever beam. Welder was

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

identified as 209051. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-P-2221-TC-U4a-S as verbally identified by QCA1.

SMAW welding of weld joint BK16A-001-005 located on PCMK OBG bike path cantilever beam. Welder was identified as 040551. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-P-2212-TC-U4c as verbally identified by QCA1.

Bay 11

This QA Inspector randomly observed the following work in progress in the Bay 11:

SMAW welding of weld joint SA6019B-001-005 located on PCMK OBG. Welder was identified as 041271. QC was identified as ZPMC CWI Xu Le Feng (QC2). Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Shao Hai Lang (QCA2), who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2312-TC-U4c and WPS-B-P-2313-TC-U4c as verbally identified by QCA2.

SMAW welding of weld joint SA6020B-001-005 located on PCMK OBG. Welder was identified as 202354. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2312-TC-U4c and WPS-B-P-2313-TC-U4c as verbally identified by QCA2.

OBG Trial Assembly Area

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

FCAW welding of weld joint SEG3007C-269 located on PCMK OBG 13AE. Welder was identified as 055564. QC was identified as ABF CWI Wu Ke Wen (QC3). Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Zhan Hai Feng (QCA3), who was not a CWI. Weld variables recorded by QCA3 appeared to comply with WPS-B-T-2233-ESAB as verbally identified by QCA3.

FCAW welding of weld joints SEG3007AH-098, 108, 118 located on PCMK OBG 13AE. Welder was identified as 050242. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA3, who was not a CWI. Weld variables recorded by QCA3 appeared to comply with WPS-B-T-2232-ESAB as verbally identified by QCA3.

SMAW welding of weld joints SEG3007S-147, 151, 155, 159 located on PCMK OBG 13AE. Welder was identified as 068924. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA3, who was not a CWI. Weld variables recorded by QCA3 appeared to comply with WPS-B-P-2213-TC-U4b-FCM-1 as verbally identified by QCA3.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Bay 10

ZPMC		焊缝返修报告		版本 Rev. No.	
Welding Repair Report				0	
项目名称 Project Name	美国海神大桥 SFOBB	部件图号 Drawing No	31TR1, 31TR2, 31TR3	报告编号 Report No.	B-WR-16931
合同号 Contract No.	04-012 0F4	部件名称 Items Name	维护行车轨道	NDT报告编号 Report No. of NDT	NA
项目编号 Project No.	ZP06-787				

焊缝缺陷描述: (母材损伤修复)
Description of welding discontinuity:
根据检查报告ZP06-787-J-B-2153回复, 由于维护行车轨道31TR1, 31TR2, 31TR3, 36TR1折弯方向错误, 导致上翼板与腹板下翼板刨开, 导致母材需进行需补深约3mm, 具体位置见下图:

**ZPMC Weld Repair Report B-WR16931
as presented to this QA Inspector**

检验员 (Inspector): Zhao Chen Sun 日期 (Date): 2011.03.16

焊缝返修位置示意图:
Draft of welding discontinuity:

04-0120F4 03 23 11 1958

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Riley, Ken

QA Reviewer